CLAIMS

An oxetane compound containing a (meth) acryloyl group, which 1. is represented by formula (1) below

$$= \bigwedge_{O}^{R^{1}} A - NH - O - R^{3} R^{4}$$

$$(1)$$

wherein R¹ represents a hydrogen atom or a methyl group, A represents $-OR^2-$ or a bond, R^2 represents a divalent hydrocarbon group which may contain an oxygen atom in the main chain, R^3 represents a linear or branched alkylene group having 1 to 6 carbon atoms, and R4 represents a linear or branched alkyl group having 1 to 6 carbon atoms.

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2. The oxetane compound containing a (meth) acryloyl group claimed in claim 1, which is a compound represented by formula (2) below.

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The oxetane compound containing a (meth)acryloyl group as claimed in claim 1, which is a compound represented by formula (3) below.

4. The oxetane compound containing a (meth)acryloyl group as claimed in claim 1, which is a compound represented by formula (4) below.

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$$\begin{array}{c} CH_3 \\ \hline \\ O \\ \hline \end{array}$$

5. A production method of an oxetane compound containing a (meth)acryloyl group, wherein an isocyanate compound containing a (meth)acryloyl group represented by formula (5) below is reacted with an oxetane compound containing a hydroxyl group represented by formula (6) below

$$= \bigwedge_{O}^{R^1} A - NCO$$
 (5)

wherein R^1 represents a hydrogen atom or a methyl group, A represents 15 $-OR^2$ - or a bond, and R^2 represents a divalent hydrocarbon group which may contain an oxygen atom in the main chain

$$HO \longrightarrow R^3 \longrightarrow R^4$$
 (6)

wherein R^3 represents a linear or branched alkylene group having 1 to 6 carbon atoms, and R^4 represents a linear or branched alkyl group having 1 to 6 carbon atoms.

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6. The production method of an oxetane compound containing a (meth)acryloyl group as claimed in claim 5, wherein a tertiary amine or a tin compound is used as catalyst.